

## **Oroville Facilities P2100 Relicensing NEPA Scoping Document 2 and Amended CEQA Notice of Preparation**

### **Project Description**

The Oroville Facilities were developed as part of the SWP, a water storage and delivery system of reservoirs, aqueducts, power plants, and pumping plants. The main purpose of the SWP is to store and distribute water to supplement the needs of urban and agricultural water users in Northern California, the San Francisco Bay Area, the San Joaquin Valley, and Southern California. The SWP is also operated for flood management, power generation, to improve water quality in the Delta, manage Feather River floodwaters, provide recreation, and enhance fish and wildlife.

Project No. 2100 encompasses 41,100 acres that includes Oroville Dam and Reservoir, three power plants (Edward Hyatt Pumping-Generating Plant, Thermalito Diversion Dam Power Plant, and Thermalito Pumping-Generating Plant), Thermalito Diversion Dam, the Feather River Fish Hatchery and Fish Barrier Dam, Thermalito Power Canal, Oroville Wildlife Area (OWA), Thermalito Forebay and Forebay Dam, Thermalito Afterbay and Afterbay Dam, and transmission lines, as well as a number of recreational facilities. An overview of these facilities is provided in Figure 1. The Oroville Dam, along with two small saddle dams, impounds Lake Oroville, a 3.5-million-acre-feet (maf) capacity storage reservoir with a surface area of 15,810 acres at its normal maximum operating level.

The hydroelectric facilities have a combined licensed capacity of approximately 762 megawatts (MW). The Edward Hyatt Pumping-Generating Plant is the largest of the three power plants with a capacity of 645 MW. Water from the 6-unit underground power plant (three conventional generating and three pumping-generating units) is discharged through two tunnels into the Feather River just downstream of Oroville Dam. Other generation facilities include the 3-MW Thermalito Diversion Dam Power Plant and the 114 MW Thermalito Pump-Generating Plant.

Thermalito Diversion Dam is 4 miles downstream of the Oroville Dam, which creates a tail water pool for the Edward Hyatt Pumping-Generating Plant and is used to divert water to the Thermalito Power Canal. The Thermalito Diversion Dam Power Plant is a 3-MW power plant located on the left abutment of the Diversion Dam. The power plant releases a maximum of 615 cubic feet per second (cfs) of water into the river.

The Power Canal is a 10,000-foot-long channel designed to convey both generating flows of 16,900 cfs to the Thermalito Forebay and pumping flows of 9,000 cfs to the Edward Hyatt Pumping-Generating Plant. The Thermalito

Forebay is an off-stream regulating reservoir for the 114-MW Thermalito Pumping-Generating Plant.

The Thermalito Pumping-Generating Plant has a generating and pumping flow capacity of 17,400 cfs and 9,120 cfs, respectively. When in generating mode, the Thermalito Pumping-Generating Plant discharges into the Thermalito Afterbay, which is contained by a 42,000-foot-long earth-fill dam. The afterbay is used to release water into the Feather River downstream of the Oroville Facilities, serves as a warming basin for agricultural water, helps regulate the power system, provides storage for pump-back operations, and provides recreational opportunities. Several local irrigation districts receive water from the afterbay.

The Feather River Fish Barrier Dam is downstream of the Thermalito Diversion Dam and immediately upstream of the Feather River Fish Hatchery. The flow over the dam maintains fish habitat in the low-flow channel of the Feather River between the dam and the afterbay outlet, and provides attraction flow for the hatchery. The hatchery was intended to compensate for spawning grounds lost to returning salmon and steelhead trout from the construction of Oroville Dam. The hatchery can accommodate an average of 8,000 adult fish annually.

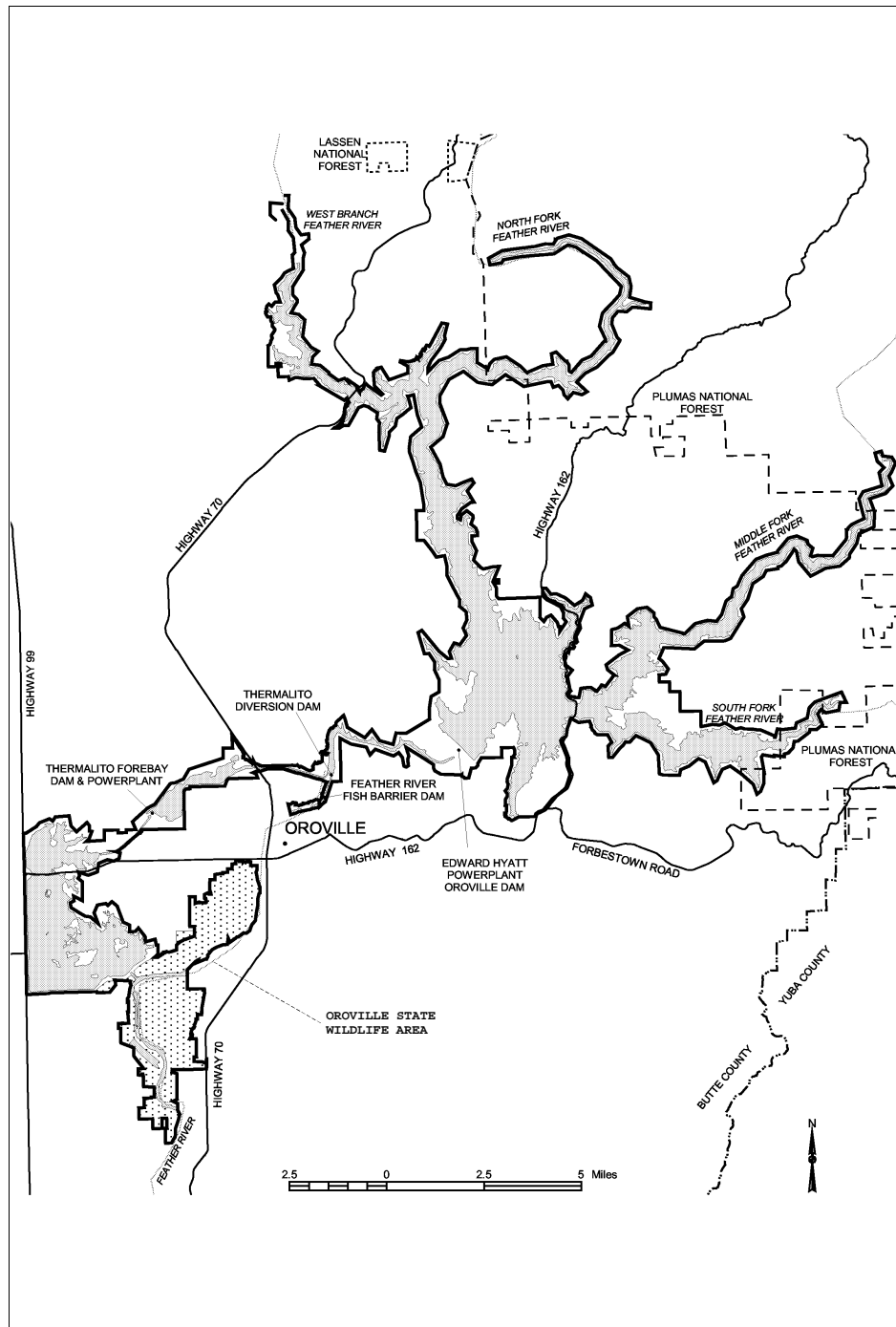


Figure 1 Oroville Facilities FERC Project Boundary